FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO OASBIO 001C1	APPLICATION NO 09/931,732
SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)	APPLICANT Bob D. Brown and Timothy A. Riley	
	FILING DATE August 16, 2001	GROUP 1635

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U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO
	1.	WO 93/10103	05/27/93	PCT				
	2.	WO 94/06810	03/31/94	PCT				
	3.	WO 94/09129	04/28/94	PCT				
	4.	WO 97/33991	09/18/97	PCT				

EXAMINER INITIAL		OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
	5.	Altmann, et al., "Novel Chemistry," *Applied Antisense Oligonucleotide Technology*, Chapter 4, pp.73-107 (1998)
	6.	Hill, et al., "Polymerase recognition of synthetic oligodeoxyribnucleotides incorporating degenerate pyrimidine and purine bases," *Proc. Natl. Acad. Sci. USA*, 95:4258-4263 (1998)
	7.	Parker, et al., "Ribozymes: Principles and Designs for Their Use as Antisense and Therapeutic Agents," *Gene Regulation: Biology of Antisense RNA and DNA*, New York, Raven Press, pp. 55-70 (1992)
	8.	Sanghvi, "Heterocyclic Base Modifications in Nucleic Acids and Their Applications in Antisense Oligonucleotides," *Antisense Research and Applications*, CRC Press, GB, Chapter 15, pp. 273-288 (1993)
	9.	Thomson, et al., "Universal Base Analogs in Antisense Oligodeoxinucleotides (as ODNs): A Therapeutic Strategy Against HIV Variability," *Human Retroviruses and Related Infections*, p. 143 (1995)
	10	David M. Tidd, "Ribonuclease H-Mediated Antisense Effects of Oligonucleotides and Controls for Antisense Experiments," Applied Antisense Oligonucleotide Technology, Chapter 8, pp. 161-171 (1998)

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EXAMINER	DATE CONSIDERED 10/7/04

*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

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ATTY DOCKET NO	APPLICATION NO
OASB.O.001C1	09/931,732
APPLICANT: Brown et al.	
FILING DATE: August 16, 2001	GROUP: 1635

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U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	1	4,458,066	07/03/84	Caruthers et al.			
	2	4,683,194	07/28/87	Saiki et al.			
	3	5,104,792	04/14/92	Silver et al.			
	4	5,112,974	05/12/92	Barton			
	5	5,223,618	06/29/93	Cook et al.			
	6	5,378,825	01/03/95	Cook et al.			
	7	5,424,413	06/13/95	Hogan et al			
	8	5,438,131	08/01/95	Bergstrom et al.			
	9	5,451,503	09/19/95	Hogan et al			
	10	5,489,677	02/06/96	Sanghvi et al.			
	11	5,539,082	07/23/96	Nielsen et al.			
	12	5,541,307	07/30/96	Cook et al.			
	13	5,571,902	11/05/96	Ravikumar et al.			
	14	5,571,903	11/05/96	Gryaznov			
	15	5,583,032	12/10/96	Torrence et al.			
	16	5,612,199	03/18/97	Western et al.			
	17	5,612,215	03/18/97	Draper et al.			
	18	5,627,032	05/06/97	Ulanovsky			
	19	5,650,271	07/22/97	Richards			
	20	5,677,289	10/14/97	Torrence et al.			
	21	5,681,702	10/28/97	Collins et al.			
	22	5,681,947	10/28/97	Bergstrom et al.			
	23	5,683,879	11/04/97	Laney et al.			
	24	5,686,242	11/11/97	Bruice et al.			
	25	5,700,922	12/23/97	Cook			
	26	5,719,271	02/17/98	Cook et al.			
	27	5,728,818	03/17/98	Wincott et al.			
	28	5,780,233	07/14/98	Guo et al.			
	29	5,780,610	07/14/98	Collins et al.			
	30	5,840,845	11/24/98	Smith et al.			

EXAMINER	DATE CONSIDERED
	10/7/04

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ATTY. DOCKET NO.	APPLICATION NO.
OASEIO.001C1	09/931,732
APPLICANT: Brown et al.	
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U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	31	5,843,650	12/01/98	Segev			
	32	5,877,162	03/02/99	Werner et al.			
	33	5,942,657	08/24/99	Bird et al.			
	34	5,952,202	09/14/99	Aoyagi et al.			
	35	5,968,748	10/19/99	Bennett et al.			
	36	5,981,179	11/09/99	Lorinez et al.			
	37	6,025,130	02/15/00	Thomas et al.			
	38	6,027,893	02/22/00	Ørum et al.			
	39	6,037,130	03/14/00	Tyagi et al.			
	40	6,084,102	07/04/00	Kutyavin et al.			
	41	6,133,031	10/17/00	Monia et al.			
	42	6,150,141	11/21/00	Jarrell			
	43	6,159,694	12/12/00	Karras			
	44	6,194,158	02/27/01	Kroes et al.			
	45	6,201,107	03/13/01	Lap-Chee et al.			
	46	6,228,642	05/08/01	Baker et al.			
	47	6,232,079	05/15/01	Wittwer et al.			
	48	6,232,462	03/15/01	Collins et al.			
	49	6,346,614	02/12/02	Metelev et al.			
	50	6,361,940	03/26/02	Van Ness et al.			

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO
	51	WO 89/02921	04/06/89	Patent Cooperation Treaty				
	52	WO 91/15601	10/17/91	Patent Cooperation Treaty				
	53	WO 93/05175	03/18/93	Patent Cooperation Treaty				
	54	WO 93/05176	03/18/93	Patent Cooperation Treaty				
	55	WO 93/23551	11/25/93	Patent Cooperation Treaty				
	56	WO 96/32474	10/17/96	Patent Cooperation Treaty				

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ATTY DOCKET NO	APPLICATION NO
OASBIO.001C1	09/931,732
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August 16, 2001	1635

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FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO
	57	WO 97/28177	08/07/97	Patent Cooperation Treaty				
	58	WO 97/38097	10/16/97	Patent Cooperation Treaty				
	59	WO 97/46711	12/11/97	Patent Cooperation Treaty				
	60	WO 99/13886	03/25/99	Patent Cooperation Treaty				
	61	WO 99/18238	04/15/99	Patent Cooperation Treaty				
	62	WO 00/61810	10/19/00	Patent Cooperation Treaty				

EXAMINER INITIAL		**OTHER DOCUMENTS** (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
	63	Chemical Abstracts and Indexes, American Chemical Society. Columbus. US. XP000376987. ISSN: 0009-2258. (1990).
	64	Amosova et al. "Effect of the 1-(2'-deoxy-Beta-D-ribofuranosyl)-3-Nitropyrrole Residue on the Stability of DNA Duplexes and Triplexes," *Nucleic Acids Research*, 25(10):1930-1934 (1997).
	65	Benseler et al., "Hammerhead-like Molecules Containing NonNucleotide Linkers are Active RNA Catalysts," *J. Am. Chem. Soc.*, 115:8483-8484, (1993).
	66	Bergstrom et al., "Synthesis, Structure, and Deoxyribonucleic Acid Sequencing with a Universal Nucoeside: 1-(2'-Deoxy-β-D-Ribofuranosyl)-3-nitropyrrole," *J. Am. Chem. Soc.*, 117:1201-1209 (1995).
	67	Blommers et al. "Effects of the Introduction of L-Nucleotides into DNA. Solution Structure of the Heterochiral Duplex d(G-C-G-(L)T-G-C-G) d(C-G-C-A-C-G-C) Studied by NMR Spectroscopy," *Biochemistry*, 33:1886-1896 (1994)
	68	Bolufer et al. "Rapid Quantative Detection of BCR-ABL transcripts in chronic myeloid leukemia patients by real-time reverse transcriptase polymerase-chain reaction using fluorescently labeled probes," *Haematologica*. 85(12):1248-1254 (2000).
	69	Brown et al., "Synthesis and duplex stability of oligonucleotides containing adenine-guanine analogues." *Carbohydrate Res*, 216:129-139 (1991).
	70	Chen et al., "Synthesis of Oligodeoxyribonucleotide N3'-P5' Phosphoramidates," *Nucleic Acids Research*, 23(14):2661-2668 (1995).
	71	Chiang et al., "Antisense oligonucleotides inhibit intercellular adhesion molecule 1 expression by two distinct mechanisms," *J. Biol. Chem.*, 266(27):18162-18171 (1991).
	72	Devaney et al. "Genotyping of two mutations in the HFE gene using single-base extension and high-performance liquid chromatography," *Anal. Chem.*, 73(3): 620-624 (2001).
	73	Donohue et al., "Rapid single-tube screening of the C282Y hemochromatosis mutation by real-time multiplex allele-specific PCR without fluorescent probes," *Clinical Chemistry*, 46(10):1540-1547 (2000).
	74	Dueholm et al., "Synthesis of Peptide Nucleic Acid Monomers Containing the Four Natural Nucleobases: Thymine, Cytosine, Adenine, and Guanine and their Oligomerization," *J Org. Chem.*, 59:5767-5773 (1994).
	75	Eritja et al., "Synthesis and properties of defined DNA oligomers containing base mispairs involving 2-aminopurine." *Nucleic Acids Research*, 14(14):5869-5884 (1986).
	76	Frutos et al. "Method for Detection of Singel-Base Mismatches Using Bimolecular Beacons," *J. Am. Chem. Soc.*, 124(11):2396-2397 (Received for publication 10/16/01) **Published 2/26/2002**.
	77	Guttridge et al. "Population Screening for Hemochromatosis by PCR Using Sequence-Specific Primers." *Genetic Testing*, 4(2):111-114 (2000).
	78	Hartmann et al., "Specific suppression of human tumor necrosis factor-α synthesis by antisense oligodeoxynucleotides," *Antisense and Nucleic Acid Drug Development*, 6:291-299 (1996).

EXAMINER	DATE CONSIDERED
	10/7/04

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)	APPLICANT Brown et al.	
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EXAMINER INITIAL		OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
	79	Heim et al., "Highly sensitive detection of gene expression of an intronless gene: amplification of mRNA, but not genomic DNA by nucleic acid sequence based amplification (NASBA)," *Nucleic Acids Research*. 26(9):2250-2251 (1998).
	80	Hendry et al. "Using Linkers to Investigate the Spatial Separation of the Conserved Nucleotides A9 and G12 in the Hammerhead Ribozyme," *Biochimica et Biophysica Acta*, 1219(2):405-412 (1994).
	81	Izant and Weintraub, "Inhibition of thymidine kinase gene expression by anti-sense RNA: a molecular approach to genetic analysis," *Cell*, 36:1007-1015 (1984).
	82	Krupp G., "Antisense Oligoribonucleotides and RNAse P. A Great Potential," *Biochimie* 75(1/2):135-139 (1993).
	83	Kunitsyn et al. "Stabilizing Effect of 5-Nitroindole (Universal Base) on DNA Duplexes Immobilized on Gel Matrix," *J. of Biomolec. Structure and Dynamics*, 15(3):597-603 (1997).
	84	Lieber et al. "Selection of Efficient Cleavage Sites in Target RNAs by Using a Ribozyme Expression Library." *Molecule and Cellular Biology*, 15(1):540-551 (1995).
	85	Lin and Brown, "Synthesis and duplex stability of oligonucleotides containing cystosine-thymine analogues," *Nucleic Acids Research*, 17(24):10373-10383 (1989).
	86	Lin and Brown, "Synthesis of oligodeoxyribonucleotides containing degenerate bases and their use as primers in the polymerase chain reaction," *Nucleic Acids Research*, 20(19):5149-5152 (1992).
	87	Lizardi et al., "Mutation detection and single-molecule counting using isothermal rolling-circle amplification." *Nature Genet.*, 19:225-232 (1998).
	88	Loakes, "3-Nitropyrrole and 5-Nitroindole as Universal Bases in Primers for DNA Sequencing and PCR." *Nucleic Acids Research*, 23(13):2361-2366 (1995).
	89	Ma et al., "Nuclease-resistant external guide sequence-induced cleavage of target RNA by human ribonuclease P," *Antisense and Nuclic Acid Drug Development.*, 8:415-426 (1998).
	90	McCurdy et al., "An Improved Method for the Synthesis of N3'-P5' Phosphoramidate Oligonucleotides," *Tetrahedron Lett*, 38(2):207-210 (1997).
	91	Medintz et al. "High speed single nucleotide polymorphism typing of a hereditary haemochromatosis mutation with capillary array electrophoresis microplates," *Electrophoresis*, 21:2352-2358 (2000).
	92	Milligan et al. "Current Concepts in Antisense Drug Design" *J. Medicinal Chemistry*, 36(14):1923-1937 (1993).
	93	Morvan et al., "Oligonucleotide Mimics for Antisense Therapeutics: Solution Phase and Automated Solid-Support Synthesis of MMI Linked Oligomers," *J Am Chem Soc*, 118:255-256 (1996).
	94	Mueller et al, "Self-sustained sequence replication (3SR): an alternative to PCR," *Histochem. Cell Biol.*, 108:431-437 (1997).
	95	Nelson et al., "N3'-P5' Oligodeoxyribonucleotide Phosphoramidates: A New Method of Synthesis Based on a Phosphoramidite Amine-Exchange Reaction," *J. Org. Chem.*, 62:7278-7287 (1997).
	96	Nichols et al., "A Universal Nulceoside for Use at Ambiguous Sites in DNA Primers" *Nature*, 369:492-493 (1994).
	97	Perbost et al., "Synthesis of 5'-O-Amino-2'deoxypyrimidine and Purine Nucleosides: Building Blocks for Antisense Oligonucleotides," *J. Org. Chem.*, 60:5150-5156 (1995).
	98	Pierce et al. "Construction of a Directed Hammerhead Ribozume Library: Towards the Identification of Optimal Target Sites for Antisense-Mediated Gene Inhibition," *Nucleic Acids Research*, 26(22):5093-5101 (1998).
	99	Pitsch et al., "Why Pentose and Not Hexose-Nucleic Acids?" *Helv Chemica Acta*. 76:2161-2183 (1993).
	100	Press, R., "Detection of Prevalent Generic Alterations Predisposing to Hemochromatosis and Other Common Human Diseases," Clinical Chem. 46:1526-1527 (2000).
	101	Restagno et al. "A Pilot C282Y Hemocheromatosis Screening in Italian Newborns by TaqMan (TM) Technology." *Genetic Testing*, 4(2):177-181 (2000).
	102	Reynolds et al. "Antisense Oligonucleutides Containinf an Internal, Non-nucleotide-based Linker Promote Site-Specific Cleavage of RNA," *Nucleic Acids Research*, 24(4):760-765 (1996).
	103	Romano et al., "NASBA technology: isothermal RNA amplification in qualitative and quantitative diagnostics," *Immunol. Invest.*, 26:15-28 (1997).

EXAMINER	DATE CONSIDERED 10/7/04

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ATTY DOCKET NO	APPLICATION NO
OASBIC.001C1	09/931,732
APPLICANT	
Brown et al.	
FILING DATE	GROUP
August 16, 2001	1635

EXAMINER INITIAL		OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
	104	Spargo et al, "Detection of *M. tuberculosis* DNA using thermophilic strand displacement amplification." *Mol. Cell Probes*, 10:247-256 (1996).
	105	Swayze et al., "The Synthesis of N,N'-O'Trisubstituted Hydroxylamines via a Mild Reductive Alkylation Procedure: An Improved Synthesis of the MMI Backbone," *Synlett*, pp. 859-861 (1997).
	106	Van Aerschot et al. "An Acyclic 5-Nitroindazole Nucleoside Analogue as Ambiguous Nucleoside," *Nucleic Acids Research*, 23(21):4363-4370 (1995).
	107	Walker, "Empirical aspects of strand-displacement amplification," *PCR Methods Applications*, 3:1-6 (1993).
	108	Zhong and Kallenbach, "Conformation and Thermodynamics of DNA 'Necks' Models for Three-arm Branch Formation in a Duplex," *J. Mol. Biol.*, 230:766-778 (1993).
	109	Zhong et al., "Effects of Unpaired Bases on the Conformation and Stability of Three-Arm DNA Junctions," *Biochemistry*, 33:3660-3667 (1994).

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)	APPLICANT Brown, et al	
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U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
		6,379,932 B1	04/30/02	Arnold, et al.	435	91.51	

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FOREIGN PATENT DOCUMENTS

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